

FIRST FIVE-YEAR REVIEW REPORT FOR WPSC CAMP MARINA MGP SUPERFUND SITE SHEBOYGAN, SHEBOYGAN COUNTY, WISCONSIN



Prepared by

U.S. Environmental Protection Agency Region 5 Chicago, Illinois

Margaret M. Guerriero
Acting Director
Superfund Division

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LIST OF ABBREVIATIONS & ACRONYMS

AOC Administrative Order on Consent

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations
COCs contaminants of concern
DMUs dredge management units

EPA United States Environmental Protection Agency

FS Feasibility Study FYR five-year review

GLLA Great Lakes Legacy Act

GLNPO Great Lakes National Program Office

ICs institutional controls
MGP manufactured gas plant
NAPL non-aqueous phase liquid
NCP National Contingency Plan
NPL National Priorities List

OU operable unit
OU1 Upland Operable Unit

OU2 River Operable Unit
PCBs polychlorinated biphenyls
PAHs polyaromatic hydrocarbons

ppm parts per million

PRP potentially responsible party
RAOs remedial action objectives
ROD Record of Decision

RI Remedial Investigation

Site WPSC Camp Marina MGP Superfund Site

TCRA time-critical removal action

UU/UE unlimited use and unrestricted exposure
WDNR Wisconsin Department of Natural Resources
WPSC Wisconsin Public Service Corporation

I. INTRODUCTION

The purpose of a five-year review (FYR) is to evaluate the implementation and performance of a remedy in order to determine if the remedy is and will continue to be protective of human health and the environment. The methods, findings, and conclusions of reviews are documented in FYR reports such as this one. In addition, FYR reports identify issues found during the review, if any, and document recommendations to address them.

The United States Environmental Protection Agency (EPA) prepared this FYR pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Section 121, consistent with the National Contingency Plan (NCP)(40 CFR Section 300.430(f)(4)(ii)), and considering EPA policy.

This is the first FYR for the WPSC Camp Marina MGP Superfund Site (Site). The triggering action for this statutory review is the issuance of the Record of Decision (ROD) for the river operable unit (OU) of the Site. The FYR has been prepared due to the fact that hazardous substances, pollutants, or contaminants remain at the site above levels that allow for unlimited use and unrestricted exposure (UU/UE). ¹

The Site currently consists of two OUs, only one of which – OU2, the River OU – is addressed in this FYR. OU1, the Upland OU, is not addressed in this FYR because EPA has neither selected nor concurred on a remedy for that OU.

The WPSC Camp Marina MGP Superfund Site FYR was led by Pablo N. Valentín, EPA Remedial Project Manager. Participants included John Feeney, the Wisconsin Department of Natural Resources (WDNR) project manager, and Susan Pastor, the EPA Community Involvement Coordinator. WDNR and the potentially responsible party (PRP) for the Site were notified of the initiation of the FYR. The review began on 12/15/2016.

Site Background

The WPSC Camp Marina MGP Site is located at 732 North Water Street, Sheboygan, Sheboygan County, Wisconsin, and is depicted on Figure 1. The Site is not listed on the Superfund National Priorities List (NPL) but currently is being addressed using the Superfund Alternative Approach. The Site is located in downtown Sheboygan.

OU1, the Upland OU, encompasses an area of approximately 2.3 acres adjacent to the Sheboygan River approximately 1 mile west of Lake Michigan. The Upland OU is the site of a former manufactured gas plant (MGP) which operated from 1872 to 1929. The operations at the MGP facility turned coal into coke, tar, and gases which contained a variety of volatilized organic constituents. The tar was sold for

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¹ The OU2 ROD stated that the statutory requirement of CERCLA Section 121 for conducting FYRs was not triggered because it was a "No Further Action" ROD. However, because hazardous substances, pollutants, or contaminants still remained at the Site above levels that allow for UU/UE, the ROD stated that EPA would conduct at least one discretionary FYR per the requirements of §300.430(f)(4)(ii) of the NCP. Although not explicitly stated in the ROD, the referenced hazardous substances, pollutants or contaminants that do not allow for UU/UE included the contamination remaining at OU of the Site, which does not have a CERCLA-selected remedy but has been the subject of a state-mandated remediation. Also note that following a consultation with EPA headquarters on June 4, 2015, a memo to the file was prepared, dated Novembe 19, 2015, clarifying that this would be a statutory review.

roofing, wood treatment, and paving roads. The gas was passed through purifiers to remove impurities such as sulfur, carbon dioxide, cyanide, and ammonia, and was then stored in large holders on the property prior to distribution for lighting and heating. All the aboveground MGP-related structures were removed between 1950 and 1966. OU1 underwent remediation under state authorities prior to the PRP asking EPA to address this Site (along with other MGP sites in Wisconsin) under the Superfund Alternative Approach. After the state-mandated remediation work was completed, the City of Sheboygan redeveloped both the former MGP property and the adjoining property to the south into a park, a condominium complex, and a river walk. The Upland OU is now within Riverside Park, which has landscaped lawn, recreational areas, seating, and sidewalks.

OU2, the River OU, is located immediately adjacent to OU1 and is approximately 4.5 acres in size. The River OU is located within the limits of the larger Sheboygan River and Harbor Superfund Site, where polychlorinated biphenyls (PCBs) are the primary contaminant of concern (COC). OU2 includes not only river sediments, but also soils along the river adjacent to OU1 that are located outside of the current OU1 containment structure.

The Sheboygan River is classified by WDNR as a Class C surface water, which means it is not suitable as a drinking water source but is suitable for fishing, fish propagation, and recreational activities such as swimming and boating. The Sheboygan River drains into Lake Michigan, which is used as a drinking water source by the City of Sheboygan and some other nearby municipalities. Swimming is not known to occur in the river in or near OU2, but boating does occur. Boat Island, located near the center of OU2, is the location of the Sheboygan Outboard Club and contains seasonal docking for boats. The portion of the Sheboygan River where OU2 is located is classified as a warm water sport fish community, meaning it is capable of supporting a community of warm water sport fish or serving as a spawning area for warm water sport fish. The reasonably anticipated future uses of the Sheboygan River in the vicinity of the Site are the same as the current uses described above.

FIVE-YEAR REVIEW SUMMARY FORM

SITE IDENTIFICATION			
Site Name: WPSC Camp Marina MGP			
EPA ID: WIN000510058			
Region: 5	State: WI	City/County: Sheboygan/ Sheboygan	
	S	SITE STATUS	
NPL Status: Non-NPL	9		
Multiple OUs? Yes	Has th	e site achieved construction completion?	
	RE	VIEW STATUS	
Lead agency: EPA			
Author name (Federal	Project Manager):	Pablo N. Valentín	
Author affiliation: EPA	A		



Review period: 12/15/2016 – 8/8/2017

Date of site inspection: 7/13/2017

Type of review: Statutory

Review number: 1

Triggering action date: 9/25/2012

Triggering action date. 9/20/2012

Due date (five years after triggering action date): 9/25/2017

II. RESPONSE ACTION SUMMARY

Basis for Taking Action

In 1990, the City of Sheboygan found a black oily substance in the subsurface near the shoreline of the Sheboygan River when constructing footings for a dock. Since the former MGP facility is within the bounds of the Sheboygan River and Harbor Superfund site, WDNR considered requesting that EPA add it to the NPL. Instead, WDNR, Wisconsin Public Service Corporation (WPSC), and the City of Sheboygan negotiated an Environmental Repair Program contract that held the Site investigation and remediation to a standard similar to that of the Superfund program. In 1992, the contract was signed, and as a result, the Site was not proposed to the NPL. Later that year, WPSC hired a contractor to conduct an investigation at the upland portion of the Site, which found hydrocarbon and cyanide impacts in the soil and groundwater. Later investigations of the upland portion of the Site, performed by another WPSC contractor, found areas of unsaturated soil impacts, BTEX (benzene, toluene, ethylbenzene and xylene) and PAH groundwater impacts across the Upland OU, and cyanide contamination in the groundwater at the southern part of the Upland OU.

Investigations of the River OU were conducted pursuant to a 2007 Administrative Settlement Agreement and Order on Consent (AOC) between EPA and WPSC, using the Superfund Alternative Approach, which required WPSC to conduct a remedial investigation (RI) and feasibility study (FS) of both OUs of the Site. Results from the OU2 RI showed that the primary COCs at the River OU are polyaromatic hydrocarbons (PAHs), including high concentrations of PAHs in non-aqueous phase liquid (NAPL) form, in OU2 soils and sediments. The PAHs originated from the former MGP. PCBs also were identified within the OU2 boundaries, but the PCBs originated from other upriver sources associated with the Sheboygan River and Harbor Superfund Site, and the PCBs were being addressed as part of that site's response actions. The OU2 RI field work included site-specific toxicity testing as part of the ecological risk assessment. The toxicity testing found that minimal risks to benthic organisms were evident at PAH concentrations between the site-specific background concentration of 18 parts per million (ppm) and 45 ppm, moderate toxic effects were evident at PAH concentrations of 45 parts per million (ppm) and above, and definite toxic effects were seen at PAH concentrations of 129 ppm and above. The RI and earlier investigations found PAH concentrations in sediments several orders of magnitude higher than these levels.

Response Actions

WDNR issued a ROD for OU1 of the Site in January 2001, and WPSC performed remedial actions at the Upland OU in 2000 through 2001. The OU1 remedial action consisted of full source area encapsulation with a vertical cutoff wall (known as a Waterloo sheet pile barrier) completely



surrounding the former MGP areas, groundwater drainage trenches to maintain inward gradients within the cutoff wall, an engineered cap (including a low-permeability geosynthetic cover), excavation and off-site thermal treatment of heavily-contaminated unsaturated soils (with either return of treated soils to the Site or off-site disposal, depending on resultant concentrations), and low-flow biosparging. Biosparging is a means of promoting natural degradation of contaminants in groundwater by injecting air into the subsurface. EPA did not participate in the selection of the remedy for OU1, so the OU1 remedy is not evaluated in this FYR.

In 2007, EPA took over the lead for CERCLA response actions at the Site. On January 27, 2007, WPSC entered into an AOC with EPA for an RI/FS at both OU1 and OU2. Since OU1 had already undergone remediation pursuant to the WDNR ROD, the RI/FS work for OU2 was prioritized. The OU2 RI Report was finalized in July 2009. While the OU2 FS was underway, in summer 2011 it became apparent that the imminent implementation of dredging activities in the portion of the river near the Camp Marina MGP Site that were being conducted as part of the Sheboygan River and Harbor Superfund Site remedial action had a high likelihood of disturbing and releasing PAHs associated with OU2. EPA determined that there was an imminent and substantial threat to human health and the environment, and in June 2011 entered into an AOC with WPSC for a time-critical removal action (TCRA) at OU2 to mitigate those threats and prevent mobilization of the PAH contaminants during the implementation of the Sheboygan River and Harbor cleanup.

The TCRA addressed the PAH-contaminated sediments in the Sheboygan River and the contaminated soils along the shoreline outside of the OU1 vertical barrier wall, but the removal work also addressed co-located PCBs from the Sheboygan River and Harbor site. The TCRA required mechanical removal of the contamination. The PCB-impacted sediments near OU2 had been defined by grids consistent with the Sheboygan River and Harbor Site cleanup plan. Those same grids were used during the TCRA, for consistency.

The primary goals of the TCRA were to:

- remove all NAPL material to the extent practicable, with visual confirmation; and
- remove all sediments with a PAH concentration greater than or equal to 45 ppm within the top 2.5 feet of the sediment surface.

The TCRA used a sediment cleanup number of 45 ppm for PAHs based on the results of the OU2 ecological risk assessment. The TCRA required a sediment removal depth of 2.5 feet based on the same assumptions used for the remedial action at the Sheboygan River and Harbor Site, which estimated a maximum scour depth of 2 feet due to boat propeller wash in areas with water depths less than five feet, and adding another 0.5 ft for protectiveness.

In addition to the TCRA goals for NAPL and PAH concentrations in sediments, the 2011 TCRA AOC required WPSC to place clean cover on areas in the river where, after removing the top 2.5 feet of sediments, the PAH concentration still exceeded 45 ppm. The TCRA anticipated that if 2.5 feet of sediment were removed from shallow areas and the underlying sediment concentration exceeded 45 ppm, then 2.5 feet of clean cover would be placed over those areas². Placing clean cover materials would

² In areas with water depths greater than five feet, EPA's May 2000 ROD for the Sheboygan River and Harbor Site estimated that the potential for scour from boat propeller wash would be limited to the top foot of sediments. Therefore, less cover thickness would be required in deeper areas of the river to protect the underlying contamination from being exposed due to scour.

serve two purposes: (1) it would provide clean materials for the ecological receptors in the biologically active zone in the top six inches of sediment, and (2) it would provide protection from the underlying contaminated sediments being uncovered due to boat propeller wash.

Due to the fact that EPA's Great Lakes National Program Office (GLNPO) was implementing a Great Lakes Legacy Act (GLLA) project to address beneficial use impairments for the Sheboygan River Area of Concern, with additional dredging work slated for the same areas being addressed by the TCRA (as well as other areas of the river and harbor), EPA did not require WPSC to cover the areas that still exceeded 45 ppm at the end of the TCRA dredging, pending completion of the GLLA project. This approach allowed the GLLA project to proceed without the added effort of removing clean cover materials that had just recently been placed. The GLLA project addressed the remaining PCB and PAH sediment contamination not addressed by the Sheboygan River and Harbor Site remedial action and/or the WPSC Camp Marina MGP Site TCRA, with the intent of eventually delisting the Sheboygan River as a Great Lakes Area of Concern. The GLLA cleanup goal for PAHs was 18 ppm.

As part of the TCRA, the PAH- and NAPL-impacted sediment areas were separated into dredge management units (DMUs) based upon data from the RI. PAH DMUs were considered complete upon achieving the required removal elevation in at least 90% of the DMU. NAPL DMUs were considered complete once there was no undisturbed NAPL visually remaining in the DMU, or less than 6 inches of disturbed (generated from dredging) NAPL residuals remained. A temporary sheet pile cofferdam was installed during the TCRA to minimize the potential for NAPL and NAPL-impacted sediments migrating downstream during removal operations. The cofferdam was comprised of two segments: one upstream of the removal area and one downstream, with the removal area also contained by Boat Island.

As noted earlier, a subsurface containment system comprised of a Waterloo sheet pile barrier and geosynthetic cover was installed at OU1 along part of the shoreline (see Figure 2) as part of the statemandated remediation activities. NAPL-impacted soils and sediments were present outside of and along the Waterloo barrier at depths up to 18 feet below the top of the sheet pile. The Waterloo barrier was not designed for the unbalanced earth pressures that the removal of these adjacent materials would cause. Consequently, a system of buttress piles and wales was designed and installed during the TCRA to provide temporary support for the Waterloo barrier as the adjacent NAPL-impacted materials were removed.

Due to the need to conduct the OU2 TCRA, the OU2 FS was never finalized. The draft FS (February 2010) contained draft remedial action objectives (RAOs) for the River OU to address the receptor risks and hazards presented in the baseline risk assessment. The draft OU2 RAOs are summarized below.

Protection of Human Health – draft RAOs

• RAO 1 - Minimize dermal contact to, and incidental ingestion of, sediment with NAPL (coal tar), visually described as oil-coated or oil-wetted sediment, under future exposure scenarios of shallow/wadable (0 to 3.5 feet) water.

Protection of Ecological Health – draft RAOs

• RAO 2 - Minimize exposure of benthic invertebrate populations to areas of sediment that exceed PAH concentrations of 45 ppm in the biologically active zone (the top 6 inches of sediment).

• RAO 3 - Minimize exposure of benthic invertebrate populations to sediment with NAPL (coal tar), visually described as oil-coated or oil-wetted sediment, or to areas that exceed PAH concentrations of 129 ppm in the biologically active zone (the top 6 inches of sediment).

Protection of Environment – draft RAOs

- RAO 4 Mitigate the potential for releases from sediment with NAPL (coal tar), visually described as oil-coated or oil-wetted sediment.
- RAO 5 Mitigate or eliminate the potential for resuspension of PAH-contaminated sediment in the water column due to boat propeller wash by removing contaminated sediment with PAH concentrations at or above 45 ppm within the top 2.5 feet of sediment.

As noted above, the draft FS Report for OU2 was never finalized because of the need to conduct a TCRA to ensure that PAH NAPL materials were not exposed and released during the Sheboygan River and Harbor cleanup. The draft FS Report, which is part of the Administrative Record, included various remedial action alternatives designed to achieve the RAOs described above. Although a remedial action was not conducted at OU2, the TCRA that was implemented achieved all of the RAOs that were identified in the draft FS.

Following completion of the TCRA and the GLLA dredging project, EPA issued a "No Further Action" ROD for OU2 on September 25, 2012. The ROD called for no further action at OU2 following completion of the TCRA. The ROD stated that the TCRA will not be considered complete until (1) all final cover materials are placed in areas that exceeded the site-specific PAH cleanup number of 45 ppm at the completion of the TCRA dredging and that still exceed that cleanup number following GLLA project dredging, and (2) EPA approves the final removal action completion report. The ROD further stated that, in the event that clean cover materials are placed over any remaining underlying contaminated sediments as described above, periodic monitoring must be conducted to ensure that the cover materials remain in place and are effective, in order to ensure continued protection of human health and the environment.

Status of Implementation

The on-site TCRA cleanup work was conducted from June through December 2011, and EPA approved the final removal action completion report on October 30, 2013. Approximately 24,572 cubic yards of sediment/soil were removed from OU2 during the TCRA. The TCRA divided OU2 into 31 DMUs. After dredging was completed to the required depth, a 2-foot sediment sample was advanced in each DMU to document post-dredge PAH (and PCB) concentrations. At the completion of the TCRA dredging work, the PAH concentration exceeded 45 ppm in only one DMU. Per the TCRA design, sand backfill was to be placed in this DMU, but as noted earlier, placement of backfill materials during the TCRA was deferred pending the results of the GLLA project which was scheduled to occur the following year.

The GLLA dredging project was initiated in August 2012 and was substantially complete by late December 2012. Based on the results of sediment confirmation sampling, GLNPO conducted a relatively small amount of additional dredging, followed by placement of residual sand covers in certain areas that exceeded the GLLA project cleanup goals for PCBs and/or PAHs (18 ppm), and this work was completed in May 2013. Some of this additional dredging and sand-cover placement work occurred within OU2 of the Site. The GLLA project utilized 110' by 110' grids for removal and post-dredge sediment sampling, and grids 22 through 42 were located within OU2. Post-dredge sediment cores were collected from the top 2 to 4 feet below the post-dredge sediment surface in each grid. Each core was

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divided into six-inch intervals in the top foot and one-foot intervals below the top foot. Surficial (0 to 6 inches below top of sediment) samples were collected in each grid for analysis of PAH (and PCB) concentrations. A six-inch sand cover was placed in six grids within OU2 where the post-dredge surficial sediment samples exceeded the GLLA PAH cleanup goal of 18 ppm or the PCB cleanup goal. These sand covers were placed in GLLA Grids 28, 29, 30, 32, 34, 36, 38, 40, and 41 (see Figure 3 for grid designations). Only one of these grids – Grid 36 – exceeded the TCRA cleanup goal of 45 ppm PAHs at the conclusion of the GLLA dredging, and Grid 36 was located within the same TCRA DMU that exceeded 45 ppm at the completion of the TCRA dredging.

Institutional Controls

Institutional controls (ICs) are non-engineered instruments such as administrative and legal controls that help to minimize the potential for exposure to contamination and protect the integrity of the remedy. ICs are required to assure long-term protectiveness for any areas which do not allow for UU/UE.

ICs are not required at OU2. The OU2 ROD did not call for ICs, and sampling results show that all OU2 areas are below 45 ppm and that the goals of the TCRA (and the draft RAOs discussed earlier) have been achieved (see Data Review discussion below). Therefore, there are no areas of OU2 which do not allow for UU/UE.

III. PROGRESS SINCE THE LAST REVIEW

This is the first FYR for the WPSC Camp Marina MGP Site.

IV. FIVE-YEAR REVIEW PROCESS

Community Notification, Involvement & Site Interviews

A public notice was made available by an ad published in the local newspaper, The Sheboygan Press, on 2/5/2017, stating that there was a FYR and inviting the public to submit any comments to EPA. Neither EPA nor WDNR received any public response to the ad. The FYR report will be made available at the Site information repository located at Mead Public Library, 710 N Eight St, Sheboygan, Wisconsin.

Data Review

As part of this FYR, EPA reviewed information and data from both the OU2 TCRA and the subsequent GLNPO GLLA cleanup project. The GLLA cleanup goal for PAHs was 18 ppm, well below the Superfund TCRA cleanup goal of 45 ppm. The GLLA project included dredging and residual sand cover placement in OU2, adjacent to the former MGP.

As noted earlier, the post-TCRA and post-dredge-GLLA sediment surfaces both exceeded the TCRA PAH cleanup goal of 45 ppm in only one grid, Grid 36. Therefore, Grid 36 was the focus of this FYR, since all other areas of OU2 achieved protective cleanup goals. The following section summarizes the results of the poling and sediment sampling performed to assess the effectiveness of the cleanup activities.

Sediment Surface Elevation

Poling activities were conducted on June 6, 2017 to assess the depth of the sand cover in the Grid 36 area. The poling locations are shown on Figure 4. The sediment elevations recorded were compared to the post-dredging GLLA sediment surface. Since a post-GLLA-sand-cover bathymetric survey was not available, a 6-inch sand cover was assumed to have been placed on top of the post-dredging bathymetric surface. According to GLLA project documentation, the sand cover ranged from 4 to 7 inches.

The comparison of the post-GLLA sand cover surface to the current sediment surface elevation is presented in Table 1. The current sediment elevation ranged from 1.2 feet below to 6.3 feet above the computed sand cover elevation. The current sediment elevation is greater than the computed sand cover elevation at 19 of 24 locations, and is an average of 2.3 feet higher than the computed GLLA-project sand cover elevation (see Figure 4), which means that this area of the river is primarily depositional. Several poling locations also noted a gritty, sandy layer at the soft push/hard push interface.

Sediment Sampling Analytical Results

In addition to poling activities, sediment samples were collected on June 6, 2017, from the Grid 36 area and from background areas, as shown on Figure 5. The results of the analytical data are presented in Table 2.

Grid 36

The PAH concentration in the three surficial sediment samples (0- to 6-inch depth) collected from Grid 36 ranged from 0.34 ppm to 0.41 ppm with an average concentration of 0.38 ppm. None of the surficial PAH concentrations exceeded the TCRA cleanup goal of 45 ppm or the GLLA project cleanup goal of 18 ppm. Additionally, none of the PAH concentrations in the three deeper sediment samples (collected at 6-inch increments at depths greater than 6 inches below sediment surface) exceeded 0.5 ppm.

Background

The PAH concentration in the three surficial sediment samples (0- to 6-inch depth) collected from the ambient area ranged from 0.8 ppm to 2.0 ppm with an average concentration of 1.2 ppm. None of the PAH concentrations in the three deeper sediment samples (collected at 6-inch increments at depths greater than 6 inches below sediment surface) exceeded 1.0 ppm.

Sediment Sampling Physical Results

The sampling conducted on June 6, 2017, showed a defined sand layer present in all three samples collected from Grid 36. The sand layer is located approximately one foot below the sediment surface and is between 0.4 and 0.5 feet thick. The material above the sand layer is a dark gray soft silt with trace organic material, typical of depositional sediment. Table 3 summarizes the sand layer.

Between 0.4 and 0.5 feet (4.8 to 6 inches) of sand was recovered in all three cores. This aligns with the documented sand cover thickness of 4 to 7 inches from the GLLA project. Material below the sand layer was not recovered in samples 5YR-SD-001 or -002. The material beneath the sand layer in 5YR-SD-003 was a dark gray silt with trace fine sand and organic material. Native red clay was not recovered in any of the three push cores.

Table 4 compares the sediment elevation at the three push core locations.

Data Review Summary

In summary, an evaluation of the current bathymetry, sediment sampling results, and core photographs was performed for Grid 36. The current sediment surface elevation is on average 2.3 feet higher in Grid 36 than the computed GLLA sand cover elevation. The average surficial PAH concentration of 0.38 ppm in Grid 36 is lower than the TCRA cleanup goal of 45 ppm and is similar to the ambient average surficial PAH concentration (1.2 ppm). Finally, core photographs indicate the presence of an approximately 6-inch thick sand layer underlying approximately 1 foot of soft sediment in Grid 36. This information indicates that Grid 36 is a depositional area, where soft sediment is accumulating on top of the GLLA sand cover. The sand cover appears to be present, intact, and effectively covering any post-TCRA or post-GLLA removal project residual material.

Site Inspection

The inspection of the Site was conducted on 7/13/2017. In attendance were EPA Remedial Project Manager Pablo N. Valentin and Brian Bartoszek of Integrys, representative for WPSC. The purpose of the inspection was to assess the current Site conditions. The sediment areas were not visible during the Site inspection/walk through since they are located beneath several feet of water, but EPA confirmed that all OU2 areas have been restored and the city park is back to its intended use.

V. TECHNICAL ASSESSMENT

QUESTION A: Is the remedy functioning as intended by the decision documents?

Yes. The cleanup of OU2, implemented as a TCRA and followed by a "No Further Action" ROD, continues to function as intended. Sediment samples and bathymetry readings collected in June 2017 to support EPA's evaluation of the performance of the remedy show that sediment concentrations are below the ecologically-protective cleanup goal and the cleanup level achieved at the conclusion of the TCRA. Bathymetry shows that clean sediment continues to deposit in the OU2 area, which is net-depositional. ICs at OU2 are neither required nor necessary. All OU2 RAOs have been achieved.

QUESTION B: Are the exposure assumptions, toxicity data, cleanup levels, and RAOs used at the time of the remedy selection still valid?

Yes. The cleanup levels for the OU2 TCRA were those established based on the risk assessment and site-specific toxicity testing conducted during the OU2 RI, and are still valid. The goals of the TCRA were based on the RAOs in the draft OU2 FS, all of which are still valid. The toxicity factors for the OU2 COCs have not changed. The current and reasonably anticipated future uses at OU2 remain the same and are not expected to change in the future. Human health and ecological routes of exposure and potential receptors have not changed.

QUESTION C: Has any other information come to light that could call into question the protectiveness of the remedy?

No. No other information has come to light that could call into question the protectiveness of the remedy.

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VI. ISSUES/RECOMMENDATIONS

No issues and/or recommendations were identified in this FYR.

VII. PROTECTIVENESS STATEMENT

OU2 Protectiveness Statement

Protectiveness Determination:

Protective

Protectiveness Statement: The remedy at OU2 is protective of human health and the environment.

The OU2 TCRA, the GLLA dredging project, and the sand cover placed in Grid 36 are functioning as intended. The concentration of PAHs in sediment throughout OU2 are well below EPA's cleanup level of 45 ppm, and sediment poling conducted in June 2017 shows that the area continues to be net-depositional, with clean sediments continuing to be deposited on top of the Grid 36 sand cover.

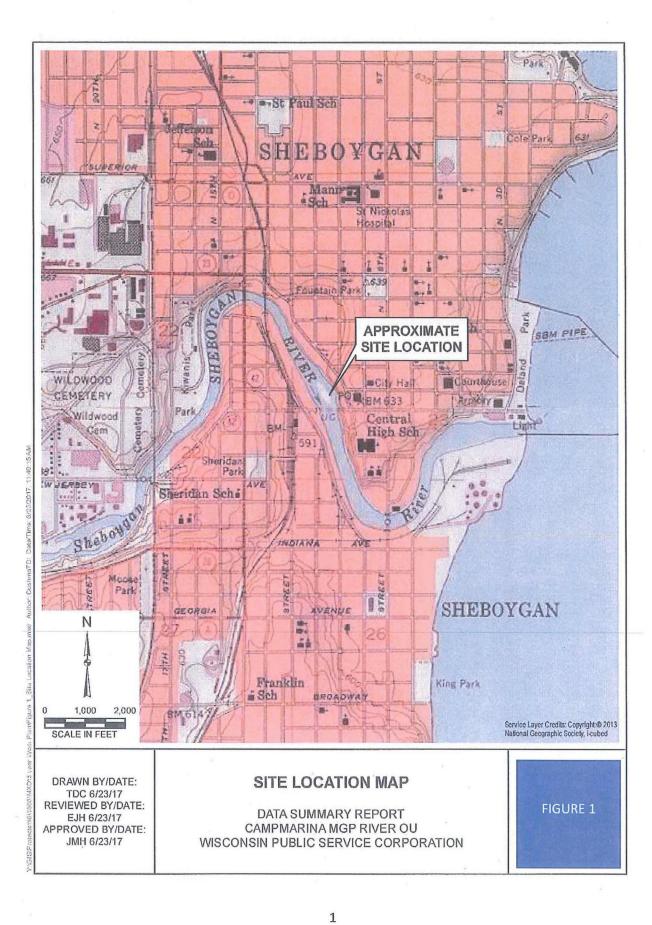
VIII. NEXT REVIEW

The next FYR report for the WPSC Camp Marina MGP Superfund Site is required within five years from EPA's signature date of this review.



FIGURES

- Figure 1 Site Location Map
- Figure 2 Location of Waterloo Sheetpile Barrier and Geosynthetic Cover in OU1
- Figure 3 Post TCRA and GLLA Sample Locations
- Figure 4 Poling Locations and Sediment Surface Elevations
- Figure 5 Sediment Sampling Locations and PAH Results



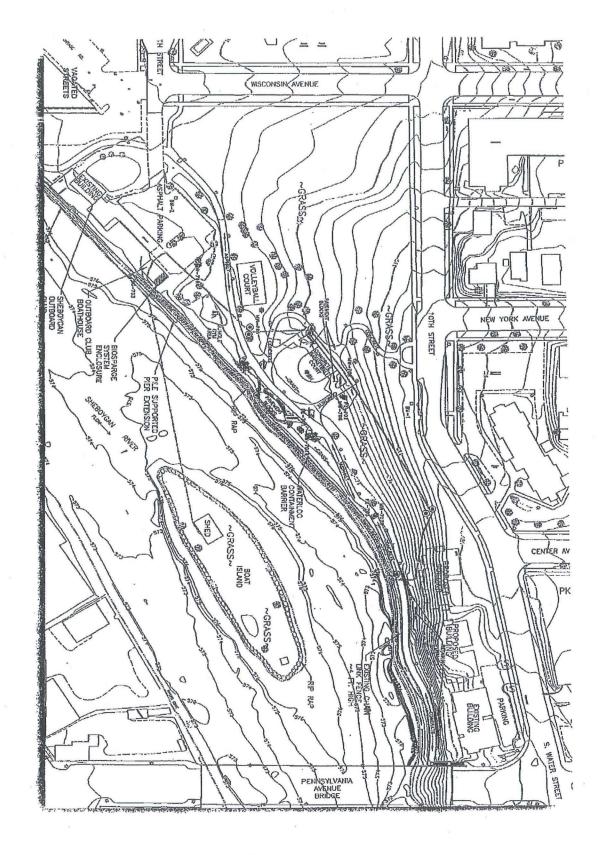
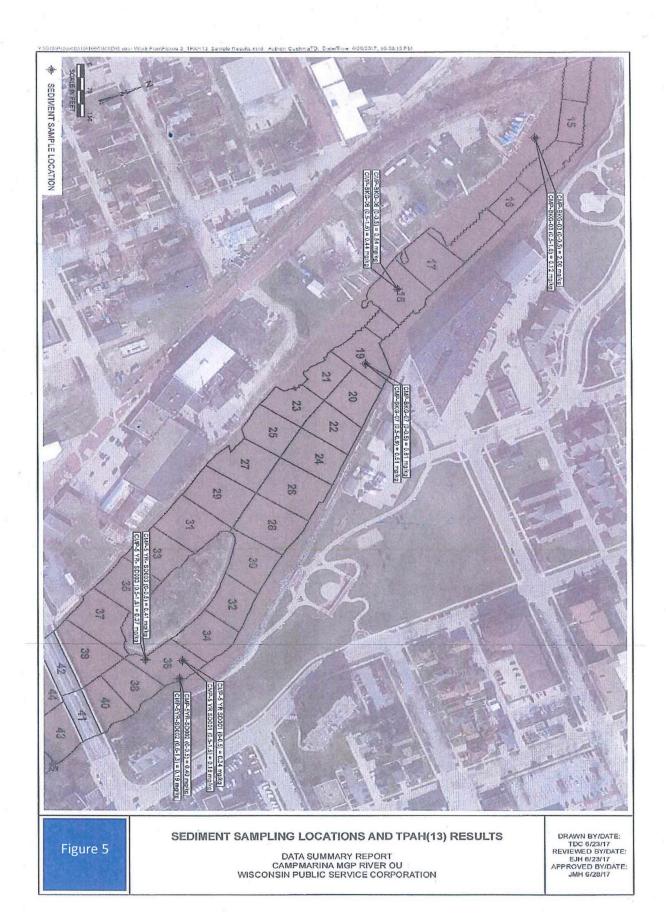


Figure 2 – Location of Waterloo Sheetpile Barrier and Geosynthetic Cover in OU1





TABLES

- Table 1 Sediment Elevation Summary
- Table 2 Analytical Data Summary
- Table 3 Sand Layer at WPSC Camp Marina MGP NAPL Removal Area
- Table 4 Sediment Elevation Comparison at Push Core Locations

Table 1 - Sediment Elevation Summary

Campmarina River Operable Unit

Wisconsin Public Service Corporation - Campmarina Former Manufactured Gas Plant Site

732 Water Street, Sheboygan, Wisconsin

Core ID	Depth to Sediment Surface (feet)	Sediment Elevation (NAVD88) ¹	Sand Cover Elevation ²	Difference ³
5YR-PL-001	5.4	-5.40	573.62	-579.0
5YR-PL-002	9.1	-9.10	565.84	-574.9
5YR-PL-003	9.3	-9.30	565.22	-574.5
5YR-PL-004	13.2	-13.20	564.59	-577.8
5YR-PL-005	14.5	-14.50	565.17	-579.7
5YR-PL-006 / 5YR-SD-003	7.5	-7.50	571.65	-579.1
5YR-PL-007	6.7	-6.70	572.27	-579.0
5YR-PL-008	8.9	-8.90	565.94	-574.8
5YR-PL-009	13.5	-13.50	564.41	-577.9
5YR-PL-010	14.0	-14.00	568.09	-582.1
5YR-PL-011	6.7	-6.70	571.61	-578.3
5YR-PL-012	9.6	-9.60	566.39	-576.0
5YR-PL-013	12.6	-12.60	564.15	-576.8
5YR-PL-014 / 5YR-SD-002	13.8	-13.80	568.13	-581.9
5YR-PL-015	8.3	-8.30	568.63	-576.9
5YR-PL-016	11.8	-11.80	566.46	-578.3
5YR-PL-017 / 5YR-SD-001	12.7	-12.70	564.50	-577.2
5YR-PL-018	13.5	-13.50	564.49	-578.0
5YR-PL-019	12.7	-12.70	567.88	-580.6
5YR-PL-020	7.3	-7.30	572.80	-580.1
5YR-PL-021	10.8	-10.80	568.34	-579.1
5YR-PL-022	12.8	-12.80	568.20	-581.0
5YR-PL-023	13.0	-13.00	568.27	-581.3
5YR-PL-024	12.8	-12.80	568.07	-580.9
			Average	-578.6

{Prepared by: EJH, Checked by: RHW, Approved by: JMH}

^{1 -} Elevation of the Sheboygan River on June 6, 2017 was 580.87 feet North American Vertical Datum 1988, per project benchmark readings

^{2 -} According to Great Lakes Legacy Act project November 7, 2012 bathymetric survey and assumed 6-inch sand cover

^{3 -} Elevation of sediment surface on June 6, 2017 compared to sand cover surface, in feet. Positive values indicate current sediment elevation is higher than sand cover elevation

				*																			
ble 2 – A	nalytical Dat	a Summary																					
	l	rabla Huli																ļ		ļ			
	na River Ope Public Servic		on - Camnm	arina Forn	ner Manufact	tured Gas Pl	ant Site																
	Street, Sheb		Marie Contraction	iai ii ia i Oi ii	ier manuraci	lureu Gasi i	ant site																
z water	Succey Since	o ygan, was																					
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				IFAII	-		FAII	FAII	FAII		FAII				FAIT		EAII	EAII		FAII	EAU	FAII	GEO
					1-Methylnaphthalene	2-Methylnaphthalene	a)	e	-	Benzo(a)anthracene	9	3enzo(b)fluoranthene	Benzo(g,h,i)perylene	Benzo(k)fluoranthene		enz(a,h)anthracene			Indeno(1,2,3-cd)pyrene		d)		5
Unique				3) 1	l #	th.	Acenaphthene	Acenaphthylene	ene) ra	Benzo(a)pyrene	ant	ery	ant	e.	‡	Fluoranthene	e e	d(p	Naphthalene	Phenanthrene		Percent Moisture
9-digit	Station	Depth	Sample	IPAH(13)	Jap	aph	pht	ht	Anthracene	ant	a)b	non	q(i,	non	Chrysene)au	it i	Fluorene	Ψ. O	thal	달	rene	Š
Code	Location	(feet)	Date	PAH	الإد	l ye	en a	nap	rth	(a))oz	b)f	(g,	K.	Chr	a,	lora	E S	1,2	l de	ena	Pyr	eut .
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					1-1	2-V				Be		Ben	Be	Ben	(A)	Oib.			. de				Δ.
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		керо	rung Units:	mg/kg	mg/kg	mg/kg	mg/kg	I mg/kg	ing/kg	mg/kg	mg/kg	mg/kg	1 mg/kg	I IIIg/kg	mg/kg	IIIg/kg	mg/kg	IIIg/kg	IIIg/kg	1 mg/kg	I mg/kg	mg/ kg	percent
											Grid 36	Samples											
		TCRA Cle	anup Goal:	45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS .	NS	NS	NS	NS	NS	NS	NS	NS	NS
0617007	CMP-5 YR	0 - 0.5	6/6/2017	0.34	<0.0110 U			<0.0090 U	<0.0156 U	0.0215 J	0.0255	0.0449	0.0091 J	0.0178 J	0.0345	<0.0061 U	0.0761	<0.0113 U	0.0095 J	<0.0230 U		0.0496	63.4
0617008	CMP-5 YR	0.5 - 1.5	6/6/2017	0.18	<0.0064 U			<0.0053 U	<0.0091 U	0.0120 J	0.0167	0.0267	0.0113	0.0115 J	0.0209	0.0042 J	0.0384	<0.0066 U	0.0106 J	<0.0134 U		0.0272	37.3
0617011	CMP-5 YR	0 - 0.5	6/6/2017	0.41	<0.0098 U	<0.0122 U	<0.0095 U	<0.0081 U	<0.0140 U	0.0264	0.0299	0.0500	<0.0050 U	0.0213	0.0420	<0.0055 U	0.0867	<0.0101 U	<0.0054 L	<0.0206 U	0.0587 J	0.0643	59.1
6061701																							
060617	CMP-5 YR	0.5 - 1.8	6/6/2017	0.37	0.0077 J	0.0085 J	0.0153 J	<0.0048 U	0.0284	0.0259	0.0297	0.0290	0.0041 J	0.0146	0.0287	<0.0033 U	0.0623	0.0097 J	0.0041	<0.0123 U	0.0646	0.0577	36.3
13 DUP	Civil 5 III	0.5 1.0	0,0,201,	0.57	0.00773	0.00053	0.02553	10100100	0,020,	010200	0.020	010250	0.00.123	010210	0.020	.0.0000	010020	0.00077	0.00.123	1010125	0.00 10	0.05.77	50.5
(N)																				-			
0617009		0 - 0.5	6/6/2017	0.40	<0.0126 U		-			0.0273 J	0.0296	0.0529	0.0065 J	0.0227 J	0.0383	<0.0070 U	0.0817	<0.0130 U	0.0090 J	<0.0264 U		0.0580	68.1
0617010	CMP-5YR	0.5 - 1.3	6/6/2017	0.19	<0.0061 U	<0.0076 U	[<0.0059 U	<0.0050 U	<0.0087 U	0.0129 J	0.0152	0.0244	0.0050 J	0.0106 J	0.0192	<0.0034 U	0.0375	<0.0063 U	0.0037 J	<0.0128 U	0.0204 J	0.0263	34.1
atal Nive	ber of GRID	26 Cample	Analuzadi	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
otal Ivun		Number of		6	1	1	1	0	1	6	6	6	5	6	6	1	6	1	5	0	5	6	6
		realine cr or	Min:	0.18	0.0077	0.0085	0.0153	0	0.0284	0.012	0.0152	0.0244	0.0041	0.0106	0.0192	0.0042	0.0375	0.0097	0.0037	0	0.0204	0.0263	34.1
			Max:	0.41	0.0077	0.0085	0.0153	0	0.0284	0.0273	0.0299	0.0529	0.0113	0.0227	0.042	0.0042	0.0867	0.0097	0.0106	0	0.0646	0.0643	68.1
			Average:	0.32	0.0077	0.0085	0.0153	n/a	0.0284	0.021	0.024433	0.037983	0.0072	0.016417	0.0306	0.0042	0.063783	0.0097	0.00738	n/a	0.04524	0.047183	49.71667
			TCRA:	45	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
Nu	mber of Sam	ples that Ex	ceed TCRA:	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
	,				-		r				round/Ar		•										
0617001	CMP-BKG		6/6/2017	2.00		<0.0121 U		<0.0080 U		0.122	0.171	0.283	0.134	0.119	0.215	0.0263	0.470	0.0170 J	0.107	<0.0204 U	0.244	0.306	58.8
0617002	CMP-BKG	0.5 - 1.6	6/6/2017	0.12	<0.0069 U		<0.0066 U	<0.0056 U		0.0107 J	0.0114 J	0.0147 J	0.0077 J	0.0080 J	0.0126 J	<0.0038 U	0.0184 J	<0.0071 U	0.0049 J	_	<0.0199 U	0.0148 J	41.5
0617003	CMP-BKG	0 - 0.5	6/6/2017	0.84	<0.0113 U			<0.0092 U		0.0494	0.0770	0.120	0.0582	0.0540	0.0918	0.0104 J	0.188	<0.0116 U	0.0478	<0.0236 U		0.129	64.4
0617004	CMP-BKG	0.5 - 1.5	6/6/2017	0.44	<0.0060 U			<0.0050 U		0.0291	0.0324	0.0606	0.0140	0.0204	0.0407	0.0038 J	0.0956	<0.0062 U	0.0160	<0.0127 U		0.0658	33.5
0617005	CMP-BKG	0 - 0.5	6/6/2017	0.81	<0.0123 U		<0.0118 U	<0.0100 U <0.0040 U	<0.0174 U	0.0506	0.0671 0.0438	0.114	0.0321	0.0436	0.0856	<0.0068 U 0.0072 J	0.186	<0.0126 U 0.0060 J	0.0298	<0.0256 U <0.0102 U		0.125	67.2
0617006	CMP-BKG	0.5 - 0.9	6/6/2017	0.51	<0.0049 U	<0.0061 U	1×0.0047 U	1 CO.0040 U	0.0095 J	0.0294	0.0438	0.0074	0.0392	0.0300	0.0549	0.00723	0.116	1 0.00001	0.02/1	_<0.0102 U	0.0661	0.0808	17.8
of Backer	round/Ambi	ent Sample	Analyzed:	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
		Number of		6	0	0	1	0	3	6	6	6	6	6	6	4	6	2	6	0	5	6	6
			Min:	0.12	0	0	0.0098	0	0.0095	0.0107	0.0114	0.0147	0.0077	0.008	0.0126	0.0038	0.0184	0.006	0.0049	0	0.057	0.0148	17.8
			Max:	2.00	0	0	0.0098	0	0.0334	0.122	0.171	0.283	0.134	0.119	0.215	0.0263	0.47	0.017	0.107	0	0.244	0.306	67.2
			Average:	0.79	n/a	n/a	0.0098	n/a	0.021633	0.048533	0.067117	0.10995	0.047533	0.045833	0.083433	0.011925	0.179	0.0115	0.038767	n/a	0.11076	0.120233	47.2
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J = Estimated concentration at or above the LOD and below the Limit of Quantification (LOQ)

(N) = Normalized sample locations created from combining parent & field duplicate samples folk NS = No Standard

DUP = Quality Control Field Duplicate Sample

Lab comments, additional data qualifiers and definitions can be found in associated laboratory r n/a = not applicable as there were no detections

Benzo(k)fluoranthene, Chrysene, Fluoranthene, Fluorene, Naphthalene, Phenanthrene and Pyrene.

TABLE 3 - SAND LAYER at WPSC CAMP MARINA MGP NAPL REMOVAL AREA

Core ID	Approximate Depth to Top of Sand Layer (feet below sediment surface)	Approximate Thickness of Sand Layer (feet)
5YR-PL-017 / 5YR-SD-001	1.1	0.4
5YR-PL-014 / 5YR-SD-002	1.0	0.4
5YR-PL-006 / 5YR-SD-003	0.8	0.5

TABLE 4 - SEDIMENT ELEVATION COMPARISON AT PUSH CORE LOCATIONS

Core ID	Sediment Elevation per post- removal bathymetry (NAVD88)	Sand Cover Elevation per June 6, 2017 poling (NAVD88)	Difference (feet)
5YR-PL-017 / 5YR-SD-001	568.17	564.50	3.7
5YR-PL-014 / 5YR-SD-002	567.07	568.13	-1.1
5YR-PL-006 / 5YR-SD-003	573.37	571.65	1.7

APPENDIX A – SITE INSPECTION CHECKLIST

Site Inspection Checklist

I. SITE INFORMATION						
Site name: WPSC Camp Marina MGP	Date of inspection: Tuky 13, 2017					
Location and Region: Shebougan WI Region 5	EPAID: WIN000 510058					
Agency, office, or company leading the five-year review: USEPA Region 5	Weather/temperature: Sunny / 73°F					
Remedy Includes: (Check all that apply) Landfill cover/containment						
Attachments: Inspection team roster attached	☐ Site map attached					

	II. INTERVIEWS (Check all that apply)
1.	O&M site manager Brian Box + 052ek Manager Remedication 07 13 2017 Name Title Interviewed Dat site Date office Dby phone Phone no. 920-433-2643 Problems, suggestions; DReport attached
2.	O&M staff Name Title Date Interviewed: □at site □at office □by phone Phone no. Problems, suggestions; □Report attached
3.	Local regulatory authorities and response agencies (i.e., State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.) Fill in all that apply. Agency Contact Name Hydrogologist Glz817 Date Phone no. Problems; suggestions; Report attached
ä	Agency Contact Name Title Date Phone no. Problems; suggestions; □Report attached
	Agency Contact Name Title Date Phone no. Problems; suggestions; □Report attached
	Agency
4.	Other interviews (optional) Report attached.



	III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)
1.	O&M Documents O&M manual Readily available D to date N/A Remarks O Readily available D to date N/A O Maintenance logs Readily available D to date N/A
2.	Site-Specific Health and Safety Plan Contingency plan/emergency response plan Readily available Readily available Up to date Up to date WA Remarks
3.	O&M and OSHA Training Records ☐ Readily available ☐ Up to date ☐ W/A Remarks ☐
4.	Permits and Service Agreements ☐ Readily available ☐ Up to date ☐ W/A ☐ Effluent discharge ☐ Readily available ☐ Up to date ☐ W/A ☐ Waste disposal, POTW ☐ Readily available ☐ Up to date ☐ W/A ☐ Other permits ☐ Readily available ☐ Up to date ☐ W/A Remarks ☐ Up to date ☐ W/A
5.	Gas Generation Records ☐ Readily available ☐ Up to date ☐ N/A Remarks
6.	Settlement Monument Records ☐ Readily available ☐ Up to date ☐ WA Remarks
7.	Groundwater Monitoring Records □ Readily available □ Up to date □ N/A Remarks
8.	Leachate Extraction Records □ Readily available □ Up to date □ N/A Remarks □ □ N/A
9.	Discharge Compliance Records ☐ Air ☐ Readily available ☐ Up to date ☐ WA ☐ Water (effluent) ☐ Readily available ☐ Up to date ☐ WA Remarks
10.	Daily Access/Security Logs □ Readily available □ Up to date □ N/A Remarks □ □ N/A

	IV. O&M COSTS							
1.	O&M Organization ☐ State in-house ☐ Contractor for State ☐ PRP in-house ☐ Contractor for PRP ☐ Federal Facility in-house ☐ Contractor for Federa ☐ Other	•						
2. O&M Cost Records No O M needed Readily available Up to date Funding mechanism/agreement in place Original O&M cost estimate Breakdown attached Total annual cost by year for review period if available								
	From To Date Date Total cost From To Total cost From To Total cost From To Total cost From Date Total cost From To Total cost From To Total cost	 □ Breakdown attached 						
3.	Unanticipated or Unusually High O&M Costs During Ro							

V. ACCESS AND INSTITUTIONAL CONTROLS	Applicable	DN/A			
A. Fencing					
1. Fencing damaged ☐ Location shown on site map ☐ Gate Remarks ☐	es secured	□ N/A		_	
B. Other Access Restrictions					
1. Signs and other security measures ☐ Location shown on sign Remarks ☐		□ N/A		_	
C. Institutional Controls (ICs)			,		
Implementation and enforcement Site conditions imply ICs not properly implemented Site conditions imply ICs not being fully enforced Type of monitoring (e.g., self-reporting, drive by) Frequency	□ Yes				
Frequency				_	
Contact Title	Dat	e Phone	no.		8
Reporting is up-to-date Reports are verified by the lead agency	☐ Yes			□ N/A	
Specific requirements in deed or decision documents have been met Violations have been reported Other problems or suggestions: Report attached	□ Yes	1		□ N/A □ N/A	
2. Adequacy ☐ ICs are adequate ☐ ICs are inade Remarks ☐	equate		□ N/A		
D. General					
Vandalism/trespassing □ Location shown on site map □ No Remarks	vandalism	evident			
2. Land use changes on site □ N/A Remarks_	9	¥			
3. Land use changes off site □ N/A Remarks_					



	VI. GENERAL SITE CONDITIONS
A.	Roads Applicable WA
1.	Roads damaged ☐ Location shown on site map ☐ Roads adequate ☐ N/A Remarks
В.	Other Site Conditions
	Remarks Dearby Park has been restore and is back to original use. Marina continues to operate. Site looks recovered.
	VII. LANDFILL COVERS □ Applicable □ N/A
A.	Landfill Surface
1.	Settlement (Low spots)
2.	Cracks □ Location shown on site map □ Cracking not evident Lengths Widths Depths Remarks
3.	Erosion
4.	Holes ☐ Location shown on site map ☐ Holes not evident Areal extent ☐ Depth
5.	Vegetative Cover □ Grass □ Cover properly established □ No signs of stress □ Trees/Shrubs (indicate size and locations on a diagram) Remarks □
6.	Alternative Cover (armored rock, concrete, etc.) N/A Remarks
7.	Bulges ☐ Location shown on site map ☐ Bulges not evident Areal extent ☐ Height ☐ Remarks ☐

8.	Wet Areas/Water Damage ☐ Wet areas ☐ Ponding ☐ Seeps ☐ Soft subgrade Remarks	 □ Wet areas/water damage not evident □ Location shown on site map Areal extent
9.	Areal extent	☐ Location shown on site map ☐ No evidence of slope instability
В. І	(Horizontally constructed mounds	□ N/A of earth placed across a steep landfill side slope to interrupt the slope in surface runoff and intercept and convey the runoff to a lined channel.)
1.	Flows Bypass Bench Remarks	☐ Location shown on site map ☐ N/A or okay
2.	Bench Breached Remarks	☐ Location shown on site map ☐ N/A or okay
3.	Bench Overtopped Remarks	☐ Location shown on site map ☐ N/A or okay
C. 1	(Channel lined with erosion control	□ N/A Il mats, riprap, grout bags, or gabions that descend down the steep side the runoff water collected by the benches to move off of the landfill cover
1.	Areal extent	ation shown on site map No evidence of settlement Depth
2.	Material type	Areal extent
3.	Erosion	ation shown on site map No evidence of erosion Depth
4.	Undercutting	ation shown on site map No evidence of undercutting Depth

¥

5.	Obstructions TypeAre SizeRemarks	eal extent	
6.	☐ No evidence of excessive growth☐ Vegetation in channels does not obstruct flow	eal extent	
D. Co	ver Penetrations Applicable N/A		/
1.	Gas Vents ☐ Active ☐ Pass ☐ Properly secured/locked ☐ Functioning ☐ Evidence of leakage at penetration Remarks	☐ Routinely sampled☐ Needs Maintenance	□ N/A
2.	Gas Monitoring Probes ☐ Properly secured/locked ☐ Functioning ☐ Evidence of leakage at penetration Remarks	☐ Needs Maintenance	☐ Good condition ☐ N/A
3.	Monitoring Wells (within surface area of landfill) ☐ Properly secured/locked ☐ Functioning ☐ Evidence of leakage at penetration Remarks	☐ Needs Maintenance	☐ Good condition ☐ N/A
4.	Leachate Extraction Wells ☐ Properly secured/locked ☐ Functioning ☐ Evidence of leakage at penetration Remarks	☐ Needs Maintenance	☐ Good condition ☐ N/A
5.	Settlement Monuments Located Remarks	☐ Routinely surveyed	□ N/A
E. Ga	s Collection and Treatment	□ N/A	
1.	Gas Treatment Facilities ☐ Flaring ☐ Thermal destruction ☐ Good condition ☐ Needs Maintenance Remarks	☐ Collection for reuse	* · · · · · · · · · · · · · · · · · · ·
2.	Gas Collection Wells, Manifolds and Piping ☐ Good condition ☐ Needs Maintenance Remarks		

3.	Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings) ☐ Good condition ☐ Needs Maintenance ☐ N/A Remarks	_
F.	. Cover Drainage Layer Applicable N/A	
1.	Outlet Pipes Inspected ☐ Functioning ☐ N/A Remarks	
2.	Outlet Rock Inspected	_
G.	. Detention/Sedimentation Ponds	
1.	Siltation Areal extent Depth \(\subseteq \text{N/A} \) \(\subseteq \text{Siltation not evident} \) Remarks	_
2.	Erosion Areal extent Depth □ Erosion not evident Remarks	
3.	Outlet Works	
4.	Dam	_
Н.	I. Retaining Walls Applicable N/A	
1.	Deformations ☐ Location shown on site map ☐ Deformation not evident Horizontal displacement Vertical displacement Rotational displacement Remarks	_
2.	. Degradation Location shown on site map Degradation not evident Remarks	_
I.	Perimeter Ditches/Off-Site Discharge Applicable N/A	×
1.	. Siltation	,

		$\overline{}$		
2.	Vegetative Growth □ Location shown on site map □ N/A □ Vegetation does not impede flow □ Type Areal extent □ Type Remarks □ Type			
3.	Erosion			
4.	Discharge Structure			
	VIII. VERTICAL BARRIER WALLS □ Applicable □ N/A			
1.	Settlement			
2.	Performance Monitoring Type of monitoring □ Performance not monitored Frequency □ Evidence of breaching Head differential Remarks			
	IX. GROUNDWATER/SURFACE WATER REMEDIES Applicable N/A			
A. Gro	ndwater Extraction Wells, Pumps, and Pipelines			
1.	Pumps, Wellhead Plumbing, and Electrical ☐ Good condition ☐ All required wells properly operating ☐ Needs Maintenance ☐ N/A Remarks			
2.	Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances Good condition Needs Maintenance Remarks			
3.	Spare Parts and Equipment ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided Remarks			
B. Surf	ce Water Collection Structures, Pumps, and Pipelines Applicable N/A			
1.	Collection Structures, Pumps, and Electrical Good condition Needs Maintenance Remarks			

2.	Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances Good condition Needs Maintenance Remarks
3.	Spare Parts and Equipment ☐ Readily available ☐ Good condition ☐ Requires upgrade ☐ Needs to be provided Remarks
C. Trea	atment System Applicable N/A
1.	Treatment Train (Check components that apply) □ Metals removal □ Oil/water separation □ Bioremediation □ Air stripping □ Carbon adsorbers □ Filters □ Additive (e.g., chelation agent, flocculent) □ Others
	☐ Good condition ☐ Needs Maintenance ☐ Sampling ports properly marked and functional ☐ Sampling/maintenance log displayed and up to date ☐ Equipment properly identified ☐ Quantity of groundwater treated annually
2.	Electrical Enclosures and Panels (properly rated and functional) □ N/A □ Good condition □ Needs Maintenance Remarks
3.	Tanks, Vaults, Storage Vessels □ N/A □ Good condition □ Proper secondary containment □ Needs Maintenance Remarks □
4.	Discharge Structure and Appurtenances □ N/A □ Good condition □ Needs Maintenance Remarks
5.	Treatment Building(s) □ N/A □ Good condition (esp. roof and doorways) □ Needs repair □ Chemicals and equipment properly stored Remarks □
6.	Monitoring Wells (pump and treatment remedy) □ Properly secured/locked □ Functioning □ Routinely sampled □ Good condition □ All required wells located □ Needs Maintenance □ N/A Remarks
D Mon	itoring Data

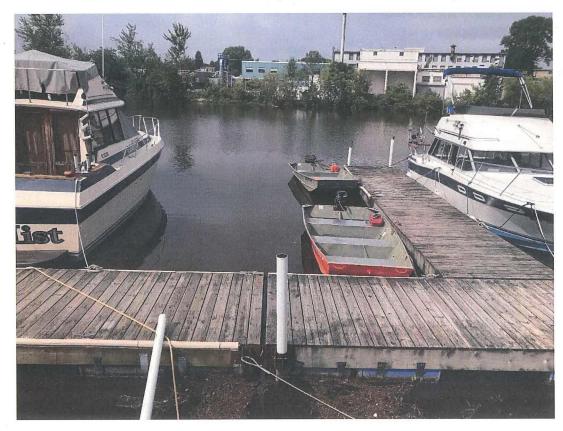
1.	Monitoring Data ☐ Is routinely submitted on time ☐ Is of acceptable quality
2.	Monitoring data suggests: ☐ Groundwater plume is effectively contained ☐ Contaminant concentrations are declining
E. M	Ionitored Natural Attenuation
1.	Monitoring Wells (natural attenuation remedy) □ Properly secured/locked □ Functioning □ Routinely sampled □ Good condition □ All required wells located □ Needs Maintenance □ N/A Remarks □
	X. OTHER REMEDIES
	If there are remedies applied at the site which are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.
	XI. OVERALL OBSERVATIONS
A.	Implementation of the Remedy
	Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.). The Site looks recovered and data collected by PRP as part of the FKR process shows cleanup goals have been achieved and maintained bata confirms area is net depositional.
В.	Adequacy of O&M
	Describe issues and observations related to the implementation and scope of O&M procedures. In particular, discuss their relationship to the current and long-term protectiveness of the remedy.
C.	Early Indicators of Potential Remedy Problems

	Describe issues and observations such as unexpected changes in the cost or scope of O&M or a high frequency of unscheduled repairs that suggest that the protectiveness of the remedy may be compromist the future.	sed in
	NA	*
D.	Opportunities for Optimization	
	Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.	
	NIA	

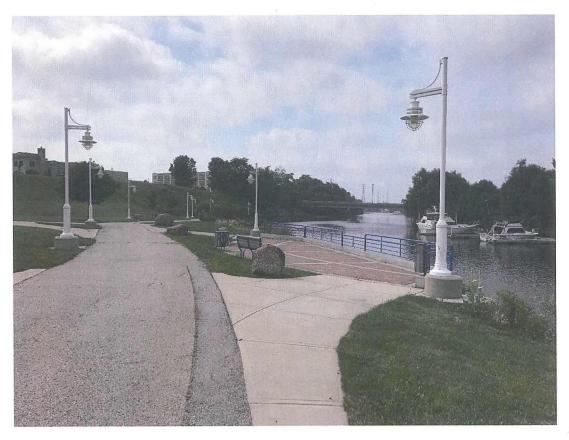
APPENDIX B - PICTURES



Picture 1 – Overview of WPSC Camp Marina MGP Site PAH Dredge Area



Picture 2 – WPSC Camp Marina MGP Site North PAH dredged area



Picture 3 – WPSC Camp Marina Site Restored Park and dredged NAPL area



Picture 4 - WPSC Camp Marina MGP Site retaining wall and rip rap

APPENDIX C – NEWSPAPER AD

Kiel, a Girl Scout Leader pm, Wednesday, February and was also a member of 8, 2017 at First Presbytethe Kiel VFW Auxiliary.

ing sports, especially the Lepak officiating. Packers, was an avid bowler, spending time with her the Kiel City Cemetery. for the endless energy and until the time of service. zest for life she enjoyed.

grandson, Jory Rule, wonderful care and con-Kenosha, step grandchildren; Jerid (Patty) Winkler, A memorial has been es-Dan (Katie) Winkler, Ka-tablished in Judy's name. tie Vandy Brink and step Meiselwitz-Vollstedt Fugreat grandchildren; Em- neral Home, Kiel is assistilv. Andrew, Griffin, Hailey ing the family. and Urban. She is further Online condolences at survived by one brother, www.meiselwitzfh.com Louis Rosenthal, one sis-

rian Church, 727 6th St. Judy enjoyed watch- Kiel with Pastor Cheryl

Burial will take place in

family and friends and Family and friends may

Judy's family would like Survivors include two to extend their thanks to children; Tammy Freis Atrium Post Acute Care, (Marlin Steller), Kiel, Jim New Holstein and Calumet (Rhonda) Freis, Kiel, one County Hospice for the Schwinn J

A memorial has been es-

EPA Begins Review

Of WPSC Campmarina MGP Superfund Site

Sheboygan, Wisconsin

U.S. Environmental Protection Agency is conducting a five-

year review of the WPSC Campmarina MGP Superfund site,

732 N. Water St., Sheboygan, Wisconsin. The Superfund law

requires regular checkups of sites that have been cleaned up -

continues to protect people and the environment. This is the

EPA's cleanup included dredging and removing sediment and

water along the shoreline, nearby Boat Island, and the upland

portion of the site contaminated with polycyclic aromatic

More information is available at the Mead Public Library,

www.epa.gov/superfund/wpsc-camp-marina. The review

The five-year-review report is an opportunity for you to tell

EPA about site conditions and any concerns you have. Contact:

You may also call EPA toll-free at 800-621-8431, 8:30 a.m. to

Pablo Valentin

312-353-8826

Manager

Remedial Project

valentin.pablo@epa.gov

with waste managed on-site - to make sure the cleanup

first five-year review of this site.

710 N. Eighth St., Sheboygan, and at

should be completed by September.

Community Involvement

pastor.susan@epa.gov

hydrocarbons, or PAHs.

Susan Pastor

Coordinator

4:30 p.m., weekdays.

312-353-1325

University of Wisconsin- bara) of Richland, WA; Milwaukee.

married Bradford Bylas- four great-grandchildren; ka in Saugatuck, Mich. and brother Robert Barr of

They adopted two chil- Sheboygan. dren, daughter Corene and son Eric. The couple death by her parents and was affectionately known call at the church on divorced in 1970, and Mr. an infant grandson. by some as "Jumpin Judy" Wednesday from 3:30 pm Bylaska preceded her in Funeral services were death. Mrs. Bylaska was held Monday, Jan. 30 at

grandsons Devin, Garrett, On Aug. 3, 1953, she and Bryce Drumheller;

She was preceded in

a social worker for school Huehns Funeral Home in districts in Door County Sturgeon Bay.

Schwinn Jr., John G.

John G. Schwinn Jr., 62, of Sheboygan, went home to his heavenly father on Thursday, February 2, 2017 at his home surrounded by family.

John was born on May 9, 1954 in Chicago, Illinois, to John G. George Sr. and Joan H. (Lease) Schwinn. He went to school at Jahn Elementary and Schurz High School in Chicago, Illinois. Upon his move to Sheboygan he became'a Journeyman Printer at Sheboygan Paper Box cago Bears Fan, enjoyed & Specialty and then on fishing with his grandson to Franzen Lithographics. Bobby and his brother Jim, He spent the last 13 years Harness Racing, spending working at Superior Car time with his friends and Wash.

Schwinn III of Sheboygan, great need. Joe (Kat) Brost and Barbie consin, 2 great-grandchil- brother, Jeff Schwinn. dren of Sheboygan and A funeral service to celbers.

for dogs and is survived vice at 4:00 pm. by the dog of his dreams, Officiating the service other dogs throughout his msted. life, which he loved dearly death.



having his family around John is survived by his him. The family would like children, Gina (Mark) Weito say a special thank you deman of San Antonio, to Mike and Sheila Conrad TX, Marsha Schwinn of for all their help and sup-Sheboygan, John (Lorrie) port during this time of

2 brothers, Jim (Debbie) ebrate John's life will be Schwinn and Jerry Sch- held on Tuesday, February winn of Sheboygan. John 7, 2017 at the Reinboldis further survived by nu- Novak Funeral Home, merous other family mem- 1535 South 12th Street, John had a great love p.m. until the time of ser-

Online condolences may boldfh.com

REINBOLD NOVAK FUNERAL & CREMATION SERVICES



He was preceded in (Eryn) Gatford. He has 12 death by his parents, grandchildren all of Wis- John Sr. and Joan and his

Sheboygan, from 1:00

his Olde English Bulldog, will be Michael Conrad, Boom! He has had several Kully Kollath, and Troy Ol-

and have proceeded him in be expressed at www.rein-

the ban a traveler Prote

again er cities in abroad, York ar even aft eral th demonst U.S. Em and near in Paris.

At ai U.S., att gration makesh and gatl bound is The

High teen

ASSOCIATE

Suprem date to Virginia wants t ing the

his high On Fri leased March, case March